

## Annex C

# Measures To Address Obstructions To The Free Passage Of Migratory And Freshwater Fish

## Environment Agency Statement of Intent

### 1. The purpose of this statement

The purpose of this Statement of Intent (Sol) is to set out, in principle, the way in which the Environment Agency intends to use the new powers that the regulations will provide in respect of fish passage and screens. It may be modified as a consequence of the Defra consultation, and we anticipate that a revised Statement may be required before the regulations are confirmed.

### 2. Our objectives and general principles

- 2.1. Fish need to move within rivers to complete their life cycles and to reach feeding and nursery areas. This is more important for some fish species than others. But many of our rivers are heavily modified and managed by obstructions and as a consequence fish may be blocked or hindered in their migrations.
- 2.2. Water is abstracted from our rivers under licence for drinking, cooling water, power generation and fish farming, and treated effluents are discharged back into them. Fish can become drawn into and trapped in abstractions. Discharges can attract fish away from normal migration routes into dead-ends where they may become trapped. Both abstractions and discharges can lead to damaging fish losses.
- 2.3. Obstructions, abstractions and discharges can all block or hinder the natural passage of fish, impacting on fish populations. We must improve the natural passage of fish in order to meet the needs of the Water Framework Directive (WFD), implement the European Eel Regulations and protect our fisheries.
- 2.4. Obstructions also change the river environment to one that is more artificial. Restoration of rivers towards a more natural state is also a key objective of the WFD. The removal of obstructions could contribute towards this objective.
- 2.5. The measures proposed in the Passage of Fish Regulations are crucial to our ability to improve fish passage. However, we recognise that free passage or screening are not essential for all fish species or all locations. Free passage is more important for migratory species with different habitat needs for stages of their life cycle, and therefore some locations will have a higher importance than others for fish passage.

Similarly, the need for screens on abstractions and discharges will vary according to site and fish species present. We will take a risk-based approach towards the need for fish passage and screening at all existing obstructions, abstractions and discharges.

- 2.6 **The WFD requires that there is no deterioration** in the ecological status of our rivers. Therefore, we must ensure that new schemes do not adversely impact on ecological status.

**General principle 1. New schemes must not be allowed to adversely affect fish stocks by constraining fish passage.**

- 2.7 While it is reasonable to adopt a precautionary stance towards new schemes, there is a legacy of existing obstructions, abstractions and discharges that may be affecting fish stocks. **We must address this legacy** in order to achieve the ecological benefits of WFD.

- 2.8 Our objective is to improve fish passage to meet the needs of the WFD by 2027, but we anticipate that it may take longer to fully address the needs of fish passage. This is because of the large number of existing structures that need to be assessed and the substantial funds that will be needed to carry out improvements needed. Owners that benefit from schemes will be expected to contribute to improvements that are needed. But in practice we think the majority of fish passage improvements will have public benefits by improving fish stocks. Therefore, the amount of **public funding will determine how quickly we can progress** with the prioritised programme of improvements.

**General principle 2. We will phase improvements to fish passage, based on prioritisation established through River Basin Plans, and depending on the funding available.**

- 2.9 **We must take account of the relative costs and benefits.** Section 39 of the Environment Act 1995 requires us to “take into account the likely costs and benefits in exercising our powers”; this will apply to the new powers. We will apply this overriding factor in considering any works in respect of our structures or those of others. The purpose of a structure, for instance to protect against flooding or provide a water supply, will be included in this consideration.

**General principle 3. We will take account of the relative costs and benefits in determining the need for fish passage or screening provisions.**

- 2.10 We recognise that existing schemes will vary in their impacts. Not all existing schemes will have significant adverse impacts and so these will need to be assessed and action taken only where necessary.

**General principle 4. Existing schemes will need to be assessed and prioritised in terms of impacts on fish populations.**

- 2.11 Obstructions on our rivers were built for various purposes; for milling or power generation, water supply, navigation/amenity, flood risk management, irrigation and other agricultural purposes including water meadows. These structures, in particular the older mill weirs, deteriorate over time, and unless they are maintained and repaired they will eventually fall down and the river will slowly return to a more natural state.
- 2.12 Structures impede fish passage and so if they are to be kept and maintained, then fish passage through them should be improved. Those who own or benefit from the structures should pay for this, although this may be varied where other beneficiaries and wider public benefits are identified.
- 2.13 Abstractions and discharges generally serve a clear purpose and associated responsibility is clear. If an abstraction or discharge is maintained then responsibility for screening lies with the operator. If it ceases, then generally there is no remaining problem for fish, although there may be exceptions to this.

**General principle 5. Where schemes are repaired or maintained, fish passes or screens will be required where this is necessary to protect fish stocks, and it will be the owners' responsibility to provide and maintain the pass or screen.**

- 2.14 Structures are often expensive to maintain and repair and so this tends to happen only where this remains cost effective. For many structures, mill weirs in particular, the original purpose no longer exists and therefore many have fallen into disrepair. Ownership of old structures is often unknown or disputed, leading to difficulties in determining who is responsible for upkeep. In general, only those structures that continue to serve a useful and financially viable purpose are maintained and repaired. Where structure no longer serves a viable purpose its removal should be the preferred option, but we will need to take account of the potential impacts on river channel stability and landscape.

**General principle 6. Structures that no longer serve a useful purpose should be removed to allow fish passage.**

- 2.15 While many structures are no longer useful for their original purpose, some have taken on new value in terms of conservation, amenity, recreation, landscape or archaeology, and we have statutory duties towards protecting these interests.

**General principle 7. We will take account of the wider socio-economic, conservation and archaeological value of structures in our decision making.**

- 2.16 We recognise there will be situations where the owner of a structure gains no benefit from maintaining or repairing it. But others may benefit, for instance, a rowing club or angling club upstream of a mill where the fishing or boating rights are owned separately to the mill. Structures originally built to control water levels may now have significant conservation benefits that would be lost if the structures are removed, for example water meadow systems.
- 2.17 There will be other cases where there are good economic reasons for maintaining a structure, but ownership and hence responsibility can not be established.

**General principle 8. We recognise that there may be wider public benefits arising from the repair and maintenance of structures, or from abstractions and discharges. We will develop criteria to take these other benefits into account.**

- 2.18 The general principle for existing schemes is that the owner should pay for any fish passage or screening needed. However the owner may not be the sole beneficiary, or indeed may not benefit at all from the scheme. One of the main public benefits will be through contributing to Good Ecological Status for the WFD. Taking account of the wider value of schemes and wider public benefits, will enable other beneficiaries to be identified.

**General principle 9. Where the repair or maintenance of a scheme has clearly identified wider public benefits, a contribution, in part or in full, from public funding should be considered.**

### **3. Need and prioritisation**

- 3.1 Our decisions concerning where fish passage or screening is required will be driven by a process of **need assessment and prioritisation**. We will develop a set of **risk-based criteria** that we can apply to decision making, taking account of the relative costs and benefits. We will also need clear criteria to determine who is responsible for funding improvements.

**We will develop risk-based criteria for prioritising improvements to fish passage, based on fisheries needs and Water Framework Directive delivery, that takes account of costs and benefits and the needs of beneficiaries.**

- 3.2 Fish passage improvements need to be based on sound science. We do not know the movement or screening needs of all species of fish that the new regulations will cover. We will carry out the necessary research to fill gaps in the science needed to develop risk-based criteria.

**Our risk-based criteria will be based on sound science so we have certainty in what we ask people to do.**

- 3.3 The technical solutions for passage and screening will differ according to the fish species present and the nature of each site. We will ensure that options, including doing nothing, are considered.

**We will consider a range of technical options for each site.**

#### **4. Proposed changes in legislation and impacts on specific cases**

- 4.1 The Salmon and Freshwater Fisheries Act 1975, Sections 6 to 13, sets out existing regulations for fish passage. Section 14 and 15 set regulations for screens, later amended by the Environment Act 1995. The paragraphs below cover each of the proposed changes, how they differ from current powers, and how we intend to use them in line with the **General principles**

##### **4.2 Extension of powers to cover all fish species**

Fish passage and screening regulations currently apply only to waters in which salmon or sea trout occur. For screening this is further limited to “water or canal undertaking or for the purposes of any mill or fish farm”. The new regulations will apply to all fish species within our jurisdiction, including non-migratory trout, coarse fish and eels, and in respect of screening, to all diversions of water except those of less than 20m<sup>3</sup> per day. The current screening exemptions applying to facilities built before 1923 will be revoked.

- 4.3 Defra intends to use the Marine Bill to extend our fisheries jurisdiction to include other migratory fish that use inland waters, specifically Shads, Lampreys and Smelt. In setting out the way in which we intend to use the powers in the following sections, we have assumed that the Marine Bill will extend our jurisdiction to these species in the future.

- 4.4 In effect, the regulations will cover all structures, abstractions and discharges within inland waters, rather than only those where salmon or sea trout occur. For migratory fish the powers will extend seaward six nautical miles, although this is already the case for salmon and sea trout. Potentially this will affect many owners and beneficiaries, depending on how sites are maintained and managed, and hence the impacts are addressed in the sections that follow.

- 4.5 There will be a fundamental difference between the way that the regulations deal with fish passes and screens. A fish pass will only be required in a new or existing structure if we deem it to be necessary, and this will be subject to authorisation to ensure its suitability. A screen will be a legal requirement on all abstractions and discharges unless we grant an exemption. Our role will be to determine where fish passes are needed and where screening is not needed.

#### **4.6 New Obstructions, Abstractions and Discharges**

We will require proponents of new schemes to incorporate appropriate fish passage and screening provisions into new structures, abstractions and discharges at their own cost. We will incorporate this requirement into our authorisation processes for structures, abstractions and discharges.

- 4.7 The existing powers will also be broadened to include new obstructions arising from natural or unintentional causes. For instance, landslips or fallen trees may cause obstruction. The solution will usually be the removal of the temporary obstruction at the cost of those accountable for it.

#### **4.8 New obstructions arising from existing structures**

Obstructions can develop due to erosion around structures such as bridges; in these circumstances works may be required to ensure passage, depending on the species present and demonstrable adverse impact on the fish population. There is no requirement currently for owners or responsible authorities to take any action to restore free passage; under the new provisions those responsible may be required to take action. In these cases, we will expect owners to pay for this, though this may be varied where other beneficiaries and wider public benefits are identified.

#### **4.9 Existing Obstructions**

Our obstructions prioritisation will identify sites requiring action and place each, according to priority, into one of the 6-year cycle periods of WFD.

- 4.10 Where we identify a need for passage on an existing structure (except where it is repaired or modified, for which see below) we will expect owners to pay for this, though this will be varied where other beneficiaries and wider public benefits are identified.
- 4.11 If there is no interest in an existing structure or no economic case to the owners and other beneficiaries, its eventual loss by the 'Do Nothing' option should prevail. This is consistent with the hydro-morphological objectives for WFD for redundant structures. There will need to be funding mechanisms available to manage the removal safely.
- 4.12 We will not require free passage at natural permanent obstructions.
- 4.13 We estimate the cost of additional activity to overcome significant existing obstructions to fish passage as £318m. The degree to which this is met from public funds will affect the balance that owners and

beneficiaries would need to contribute and the timescale for completion of the programme.

#### **4.14 Existing Abstractions and Discharges**

The regulations require screening at all sites unless we grant an exemption. Yet we know that not all sites will require screens, indeed most discharges probably will not. We have suggested to Defra that a 5 year lead-in is needed in respect of existing abstractions and discharges to enable us to take a phased and risk-based approach to screening. For abstractions we will do this as part of the CAMS (Catchment Abstraction Management Strategies) Review. Without this, owners of existing abstractions and discharges might install screening that is later deemed unnecessary.

4.15 In cases where screening is deemed necessary on existing abstractions or discharges it will be the owner/occupiers responsibility to install and pay for this. We will investigate how this might apply to licences of right. We will provide advice regarding the type of screening that is appropriate.

#### **4.16 Sluice operation**

Existing regulations for sluice operation are outdated, requiring them to be kept closed on Sundays and other times when not required for milling, and will be simplified. Sluices are in effect obstructions, and we will deal with these as obstructions to fish passage.

4.17 There will be new powers for us to:

- direct operation of sluices (to benefit fish passage at sluices or associated fish pass);
- to install or maintain sluices (for fish passage purposes);

4.18 We will use these powers in line with the principles already set out, taking a prioritised and risk-based approach. We will seek to direct the operation of sluices (minimum openings, sequence of operation of sluices) only where their operation interferes with the passage of fish, or reduces the effectiveness or efficiency of nearby upstream or downstream dedicated passage facilities. We must take account of the primary purpose of any sluice in doing this. The key use of these powers will be to ensure that sluices are operated in ways that minimise obstruction to fish.

#### **4.19 Modification or replacement of existing schemes.**

An owner of an obstruction may currently be required to install a fish pass when rebuilding the structure for half or more of its length, or where the degree of obstruction is increased; this only applies on rivers with salmon or sea trout. The new regulations will broaden this requirement to cover any substantial alteration to a structure, or

maintenance that will preserve its continued existence, and will also apply to all fish species.

4.20 This means that any works on an in-river structure, that might increase the degree of obstruction must be notified to the Environment Agency. We will then assess the proposal and decide whether a fish pass is required.

4.21 Without repair and maintenance, structures deteriorate and eventually will cease to obstruct passage. Hence the preservation and maintenance of a structure should carry with it a duty on the owner and other beneficiaries, to overcome any obstruction to fish passage.

4.22 **Power to refuse construction of a fish pass.**

We **will** refuse construction of a fish pass where:

- it is likely to compromise the operation of an existing (approved or consented) fish pass.
- the design is inappropriate
- it is intended to provide passage in a permanent natural obstruction.

We will seek to ensure that fish pass proposals are fit for purpose and take account of wider needs, but we **may** refuse construction where:

- it would facilitate the spread of undesirable non-native fish species.
- it would compromise a statutory navigation, flood defence or licensed abstraction.
- it would compromise the integrity of a designated conservation site
- removal of the structure is the preferred option.

4.23 Our decisions will be guided by the balance of environmental, social and economic costs and benefits.

4.24 **Power to close a fish pass (including sluices/gaps).**

We will use our powers to close fish-passes temporarily in order to;

- facilitate structural and/or operational maintenance to a pass (or nearby structures where this is necessary for Health and Safety reasons);
- conserve water and/or water levels for potable or other licensed abstraction;
- maintain a statutory navigation;
- for other over-riding conservation reasons, during droughts or other emergencies (e.g. pollutions)
- to prevent the spread of fish diseases
- for scientific purposes, e.g. operation of integral traps

4.25 **Power to carry out works and recover costs.**

We will carry out works as necessary, including the removal of a structure, and recover costs where an owner or developer is required to install a fish pass or screen, but fails to do so, or fails to provide a suitable pass or screen.

#### **4.26 Power to take ownership of a structure or fish pass.**

We may (subject to risk and liability being acceptable) take ownership of a structure or fish pass, and carry out necessary fish passage works where the owner cannot be identified. This may include the removal of the structure.

#### **4.27 Power to raise funds from fishery owners/occupiers.**

The owner of an existing obstruction may get little or no benefit from installing a fish pass, while fishery owners within the river catchment might benefit from this. The costs of improvements can be high and the burden may be more readily accepted if shared between the fishery owners who will benefit.

4.28 We will use the power to raise funds from fishery owners/occupiers only where the majority of affected fishery owners/occupiers are supportive of such a scheme, subject to costs and benefits.

#### **4.29 Fish Pass Authorisation Process**

The current authorisation process has shortcomings. The new regulations will clarify the process. We will apply conditions to approvals to make clear any further actions expected, including maintenance and operation of the structure and pass, including any sluices. Provision will also be made to enable any approval to be revoked where there is default from the approved form and dimensions or the attached conditions

4.30 We will modernise the process to reduce the numbers of existing fish passes with Provisional Approval, and reduce the burden of monitoring requirements associated with this. We will do this by applying a risk-based approach so that those passes meeting relevant criteria, demonstrating low risk and best practice constructions will receive Final Approval immediately. This will be balanced with the power to require improvements to a fish pass that is inadequate.

4.31 Provisional Approval will be applied to those that are considered high-risk, enabling us to place a time limit on actions required before for Final Approval.

4.32 We will ensure that our fish pass authorisation procedure harmonises with Land Drainage consenting for applicants.

4.33 The authorisation process will in future be applicable to structures not originally built as fish passes, for instance canoe slaloms or locks. It will therefore be possible for such structures to be approved as fish passes.

#### **4.34 Screens**

There is no existing authorisation process for screens, other than where this is included as part of an abstraction or discharge licence. There is simply a legal requirement to provide a screen where salmon or sea trout occur. We have procedures to inspect sites likely to require screens, provide advice and, if necessary take enforcement action. This approach, extended to all species, will continue under the new regulations, but in addition we will exempt sites where screening is not needed.

4.35 Around one third of abstraction licences are time-limited and are reviewed on a six year cycle. We will assess these sites for screening as part of this review cycle. We will assess the need for screening on the remaining abstractions on a prioritised basis over a similar period.

4.36 Only a small proportion of licensed discharges are likely to require screening and we expect these to be limited to certain types such as fish farm or cooling water discharges. Therefore we will assess the risk associated with each type of discharge and then take a prioritised approach to those that present a risk. This will avoid assessing many thousands of discharges of very low risk to fish passage.

4.37 As far as possible we will incorporate screening requirements (and exemptions) into existing procedures for licensing abstractions and discharges. In practice we will discuss screening with owners and provide advice to ensure that where screening is needed, it is suitable for each site.

#### **4.38 Duty of maintenance**

There is no current statutory duty of maintenance for fish passes or screens. Under the new regulations, a duty of maintenance will extend to all fish pass and screen owners/occupiers.

4.39 We will establish procedures for auditing and enforcing with respect to this requirement, applying a risk-based, prioritised approach.

### **5. Enforcement**

- 5.1 The regulations will introduce new enforcement powers to:
- access land and construct pass or screen
  - serve formal notice for owner/occupier to take action in respect of a pass or screen.
  - undertake works and recover costs

5.2 We will use these powers in line with the principles set out above.

**Environment Agency**  
**January 2009**